

ABSTRACT OF THE INVENTION

The invention provides a LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$. The LM609 grafted antibody consists of at least one LM609 CDR

5 grafted heavy chain polypeptide and at least one LM609 CDR grafted light chain polypeptide or functional fragment thereof. Nucleic acids encoding LM609 grafted heavy and light chains as well as nucleic acids encoding the parental non-human antibody LM609 are additionally

10 provided. Functional fragments of such encoding nucleic acids are similarly provided. The invention also provides a method of inhibiting a function of $\alpha_v\beta_3$. The method consists of contacting $\alpha_v\beta_3$ with a LM609 grafted antibody or functional fragment thereof under conditions

15 which allow binding to $\alpha_v\beta_3$. Finally, the invention provides for a method of treating an $\alpha_v\beta_3$ -mediated disease. The method consists of administering an effective amount of a LM609 grafted antibody or functional fragment thereof under conditions which allow

20 binding to $\alpha_v\beta_3$.